Process report



Introduction

Jet solar team is made up of eight students from different parts of the globe. The nationalities represented in the group are Belgium, Cambodia, Nigeria and Thailand. Each of these countries has different culture and norms which are incorporated in the group.

There is a good understanding among the team members everyone in the team is given the opportunity to make contributions or suggestion. Everyone's idea is welcome, although we have a leader but no one is superior more than other team members.

The team has a unique way of approaching problem which is as a result of difference in ethnicity and culture. This cultural diversity gave the group a sense of completeness and more comparative advantage over other team.

Cultural difference in the team has positive impact on the team's discussion making process when we are confronted with problems that needs urgent solution.

Organisation

The group is organized in such a way that everybody is useful and busy with some tasks. We have a leader whose responsibility is to assign tasks to each member of the team he also ensures that each team member is working hard enough in other to meet deadlines.

We have a good and transparent leadership; the leader takes everyone along and listens to the team. We have a secretary whose responsibility is to take note all ideas and point during meetings. The secretary prepares the meeting report of the previous meeting and comes with it to the next meeting.

Tasks are done using the principle of division of labor, the entire team in divided in group of two or three student each with a specific task and a deadline. Each group can also split into subgroups where individuals are given their personal task and also with deadlines. The task done by an individual and the amount of time spent on that task is recorded in our work breakdown structure (WBS). Each individual has a log book where he or she writes down the amount of time he spends working on a particular task. This enable us to know how much time is used to complete a task and how much work is done by each team member, we can also avoid the situation in which some one or two people in the team are working more than the others.

Jet Soalr Team

Tasks are distributed equally among all team members, if a group is having some difficulties they can ask for assistance from other group or can demand for an extra person to join them to make their job much easier.

Skills & Problems

So far we have finished the Mechanical calculations, the Sankey diagram, the Simulink case and structure design for the engineering. For the educating and enterprising, we have made the marketing research, Wiki and our own website.

Links:

Wiki:http://en.wikiversity.org/wiki/Topic:Engineering_Education/Engineering_Experience_4: _Design_a_Small_Solar_Vehicle/Team_PM9

Website: http://ee4jetsolarteam.yolasite.com

This project is about the solar vehicle, which includes some new knowledge of solar energy, mechanics, electricity and some software. At first we really did not know what should do and how to start. A lot of formulas about mechanical calculation and a complex software Mat-lab made us confused. We assumed some parameters only by guess, such as the mass of the vehicle, the diameter of wheels and the gear ratio, but failed finally. Fortunately, we got the help from the coach and redid the calculation in a smarter way during about one week. Moreover, we learned some extra knowledge if we have made these mistakes.

However, we still have some problems, some of which are really important for the project. Simulink has not been finished yet so that we can not confirm the accuracy of calculation. The structure of the vehicle also has uncertainties. For example, we may not find that kind of special materials and make components by ourselves. But we believe that we can solve the above and future difficulties with the cooperation of all team members in the following weeks.

Cooperation

At the beginning of the project, one of the most difficult problems in team work was communication because we have eight members coming from four different countries in total. Fortunately we made a great agreement on this problem and solved it quickly by clear plans and regular meetings. As a result, everyone knew what he or she was expected and tried his/her best to make contribution to the group. We manage to another manner of working to improve work efficiency. It means dividing the team into 3 to 4 small groups, instead of working individually or in a big eight-person team. Besides, we use Dropbox to exchange files online which is really convenient.

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As for the contact with the coach, we meet with Mr. Tan Ye almost every week and get advices from him. When facing problems we will first try to find the solution by ourselves and if we are stuck with something we will turn to our coach. He guides us which part we should focus at and reminded us all the deadlines. Of course he gave us advice about our working, such as the calculations we finished.

Conclusion

The most interesting experience for us is to work in a mixed-culture team. We have Nigerian, Belgian, Cambodian and Chinese persons. While working together we sometimes experience some culture gaps, which is not surprising. For example de Belgian persons can speak Dutch to each other while the rest does not understand it and so for the Chinese.

We deal with this problem as we repeat our conclusion, it saves time and at the same time we can make everyone clear. When working as a team, we noticed that it is quite quick to deal with problems together. Since we have different view angles, we can solve the problem eventually even it looks so unachievable at first.

To summarize, we met problems but we could fix it later on and make our team better. We do quite enjoy working on the EE4.

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